

Secondary Containment Requirements

The requirement for secondary containment of waste containers in an SAA or MWSAA is a best management practice throughout industry and government. Secondary containment capacity of 110% of the largest container being stored is an industry standard. The secondary containment requirement does not depend on the actual volume of waste being stored, only the largest container in storage. Remember that physical space and segregation of incompatible chemicals in secondary containment are important as well. Each container should be stored safely.

Metal containment is acceptable for non-corrosive wastes.

For example:

A lab SAA contains 3-one liter bottles of waste. Secondary containment should be able to contain 110% of 1 liter or 1.1 L. In this case an 8"x10" plastic photo tray is acceptable. ($8'' \times 10'' \times 1'' = 80$ cubic inches or 1.3 liters). See ordering information below.

For example:

A lab SAA contains a 5-gal flammable waste can, 2-1 pint bottles, and a 20 ml vial. Secondary containment should be able to contain 110% of 5 gallons or 5.5 gallons (20.8 L). In this case a Polyethylene, Rubbermaid 5-gal, 18"x26"x3.5" is appropriate ($18'' \times 26'' \times 3.5'' = 1,638$ cubic inches or 27.3 L). See ordering information below.

For example:

A lab MWSAA has a collection container for scintillation vials. The typical storage configuration is a plastic bag inside a 12.2 gal container. A full bag is approximately 750 vials (20 ml each) or 15 liters of liquid. Secondary containment should be able to contain 110% of 15 liters or ~4.4 gallons. The secondary containment requirement is satisfied by the plastic bag inside a 12.2-gallon container. The plastic bag and 12.2 gallon container is provided by Waste Management.

Secondary Containment Options

Secondary containment tubs and trays are available from several suppliers with whom LBNL has system contracts that facilitate ordering. Other plastic trays and tubs are available from suppliers such as VWR with a two-day delivery time. The following tables list various secondary containment options based on typical containers found in many Berkeley Lab research labs. These are only examples. Other suppliers may have equally acceptable items for secondary containment. If you have questions, please contact your Generator Assistant.

Container size: One liter or less

Supplier	Item	Description	Catalog number	Cost
Central Stores	Plastic photo developing tray 8"x10"	Photographic Tray, White, High impact Plastic, flat bottom, 8"x10". Richard Mfg. Co, Cescolite 810T, Photoquip Inc. 71707-00 Plastic photo developing tray 8"x10"	Stores # 6750-29165	\$8.95
	Plastic photo developing tray 14"x17"	Photographic Tray, White, High impact plastic, flat bottom, 14"x17", Richard Mfg. Co., Cescolite 1417T, Photo-Quip 71707-30	Stores # 6750-29166	\$23.75

Container size: One 5-gallon flammable liquids safety can (diameter 12.5 inch) or one 5-gallon carboy

Supplier	Item	Description	Catalog number	Cost
VWR (catalog page 163)	Palletote Boxes	HDPE, Rubbermaid, 1.3 cu.ft. box (19.5"x15.5") Rubbermaid No. 1721-GRAY	VWR No. 62661-125	\$26.08
	DUR-X Storage Containers	Polyethylene, Rubbermaid 5-gal (18"x26"x3.5"),	VWR No. 62660-461	\$17.82

		Rubbermaid No. 3506-WHITE		
	Carb-X Clear Boxes	Polycarbonate, Rubbermaid 5-gal (18"x26"x3.5"), Rubbermaid No. 3306-CLEAR	VWR No. 62660-701	\$22.02
Grainger		TOTELINE 780508, 6.9-7-gal (19.75"x12.75"x7.875"),	4TH05	\$22.28
McMaster-Carr	LDPE bench-top tray	Item H: LDPE bench-top tray with top grating deck 25"x21.5"x3"	40695T82	\$51.56

Container size: Four 5-gallon flammable liquid safety cans (diameter 12.5 inch)

Supplier	Item	Description	Catalog number	Cost
McMaster-Carr	HDPE pallet	HDPE pallet with bottom grating deck for pails Item G: 32.5"x21.25"x8" (cap. 4 5-gal pails)	12635T1	\$66.34